

What is claimed is:

1. An image forming apparatus, comprising:

administering means for administering the life of the apparatus in accordance with administrative information on the used state of the apparatus;

main storage means for renewably saving the administrative information; and

auxiliary storage means for saving the administrative information as auxiliary information,

wherein the administering means reads pieces of information saved in the main storage means and the auxiliary storage means if necessary and updates contents of the information in the main storage means and the auxiliary storage means in accordance with the reading result.

2. An image forming apparatus according to claim 1,

wherein:

the administrative information and the auxiliary information include index information representing a working amount of the apparatus from a specified reference point of time, and

the administering means saves the administrative information read from the main storage means in the auxiliary storage means as the auxiliary information if the working amount

of the apparatus grasped from the index information read from the main storage means is larger than the working amount of the apparatus grasped from the index information read from the auxiliary storage means.

3. An image forming apparatus according to claim 1, wherein:

the main storage means is detachable from the apparatus and exchangeable for another main storage means for exchange in which specified identification information is saved beforehand, and

the administering means saves the auxiliary information read from the auxiliary storage means in the main storage means and deletes the identification information saved in the main storage means when the information read from the main storage means mounted in the apparatus includes the identification information.

4. An image forming apparatus according to claim 1, further comprising at least one detachable unit detachably mountable into a main body of the apparatus, wherein the administrative information saved in the main storage means includes information on the used state of at least one detachable unit.

5. An image forming apparatus according to claim 4, wherein at least one developer for containing a developing agent for image formation is mountably constructed as the detachable unit, and the administrative information and the auxiliary information include developer information on the used state of the developer.

6. An image forming apparatus according to claim 5, wherein:

the developer includes a developer information storage means for saving the developer information, and

when the developer is to be detached from the main body of the apparatus,

the administering means writes the developer information read from the developer information storage means in the main storage means as at least a part of the administrative information when the developer is mounted into the main body of the apparatus while writing information corresponding to the developer information out of the administrative information saved in the main storage means in the developer information storage means prior to the detachment of the developer from the main body of the apparatus.

7. An image forming apparatus according to claim 4, wherein the main storage means is provided in one detachable unit

and the auxiliary storage means is provided in the detachable unit other than the one in which the main storage means is provided or in the main body of the apparatus.

8. An image forming apparatus according to claim 1, further comprising a notifying means for notifying an occurrence of an abnormality when the abnormality occurs in an access from the administering means to the main storage means.

9. An information administering method for administering the life of an image forming apparatus in accordance with administrative information on the used state of the image forming apparatus, comprising the steps of:

writing the administrative information in main storage means;

writing the administrative information in auxiliary storage means as auxiliary information if necessary;

reading the pieces of information saved in the main storage means and the auxiliary storage means; and

updating contents of the information saved in the main storage means or the auxiliary storage means based on the reading results from the main storage means and the auxiliary storage means.

10. An image forming apparatus, comprising:

main storage means detachably mountable into a main body of the apparatus and adapted to save administrative information on the used state of the apparatus; and

administering means for reading/writing the administrative information from/in the main storage means mounted in the apparatus and administering the life of the apparatus in accordance with the administrative information saved in the main storage means,

wherein the administering means judges whether or not the information read from the main storage means mounted in the apparatus includes identification information representing a difference between this main storage means and the main storage means in which the information was written prior to the readout, and controls the reading/writing of the administrative information from/in the main storage means based on a judgment result.

11. An image forming apparatus according to claim 10, further comprising auxiliary storage means for auxiliary saving the administrative information if necessary, wherein the administering means writes the information read from the auxiliary storage means in the main storage means and deletes the identification information saved in the main storage means when the information read from the main storage means includes the identification information.

12. An image forming apparatus according to claim 10, further comprising at least one detachable unit detachably mountable into the main body of the apparatus, wherein the administrative information saved in the main storage means includes information on the used state of at least one detachable unit.

13. An image forming apparatus according to claim 11, further comprising at least one detachable unit detachably mountable into a main body of the apparatus, wherein either one of the main storage means and the auxiliary storage means is provided in one detachable unit and the other thereof is provided in the detachable unit other than the one in which the one detachable unit or in the main body of the apparatus.

14. An exchange storage unit replaceable for a storage unit mountable into an image forming apparatus for saving administrative information on the used state of the apparatus, wherein identification information for distinguishing the exchange storage unit and the storage unit mounted in the apparatus from each other is saved beforehand.

15. An information administering method for an image forming apparatus in which a main storage means for saving administrative information on the used state of the

apparatus is detachably mountable and the life of the apparatus is administered in accordance with the administrative information, comprising the steps of:

reading/writing the administrative information from/in the main storage means mounted in the apparatus if necessary;

judging whether or not the information read from the main storage means mounted in the apparatus includes identification information representing a difference between this main storage means and the main storage means in which the information was written prior to the readout; and

controlling the reading/writing of the administrative information from/in the main storage means based on a judgment result.

16. An information administering method according to claim 15, further comprising the steps of:

saving the administrative information in an auxiliary storage means if necessary; and

writing the information read from the auxiliary storage means in the main storage means as the administrative information and deleting the identification information saved in the main storage means when the identification information is judged to be included in the judging step.

17. An image forming apparatus, comprising:

a photosensitive member cartridge detachably mountable into a main body of the apparatus through a photosensitive member opening formed in the main body of the apparatus;

a developing rotary which is rotatably constructed about a center axis thereof with respect to the main body of the apparatus and in which at least one developer cartridge is mountable;

driving means for rotating the developing rotary to position the developing rotary to a specified detachment position where the developing cartridge can be mounted and detached through a developer opening formed in the main body of the apparatus; and

control means for prohibiting the rotation of the developing rotary by the driving means when the photosensitive member cartridge is not mounted in the main body of the apparatus.

18. An image forming apparatus according to claim 17, further comprising a developer covering member free to open and close the developer opening.

19. An image forming apparatus according to claim 18, wherein the control means prohibits the rotation of the developing rotary by the driving means when the developer covering means is open.

20. An image forming apparatus according to claim 17, further comprising a photosensitive member covering member openably and closably mounted on the main body of the apparatus and adapted to cover at least the photosensitive member opening in a closed state thereof,

wherein the control means permits the rotation of the developing rotary by the driving means regardless of whether the photosensitive member cartridge is mounted or not when the photosensitive member covering member is closed.

21. An image forming apparatus according to claim 20, wherein the photosensitive member covering member covers both the developer opening and the photosensitive member opening in a closed state thereof.

22. An image forming apparatus, comprising:
a photosensitive member cartridge detachably mountable into a main body of the apparatus through a photosensitive member opening formed in the main body of the apparatus;

a developing rotary which is rotatably constructed about a center axis thereof with respect to the main body of the apparatus and in which at least one developer cartridge is mountable;

driving means for rotating the developing rotary to position the developing rotary to a specified detachment position where the developing cartridge can be mounted and detached;

a photosensitive member covering member openably and closably mounted on the main body of the apparatus and adapted to cover at least the photosensitive member opening in a closed state thereof; and

control means for permitting the rotation of the developing rotary by the driving means when at least one of a first and a second conditions is satisfied while prohibiting the rotation of the developing rotary by the driving means when none of the first and second conditions is satisfied, the first condition being the condition that the photosensitive member cartridge is mounted in the main body of the apparatus, the second condition being the condition that the photosensitive member covering member is closed.

23. An image forming apparatus, comprising:

a photosensitive member cartridge detachably mountable into a main body of the apparatus through a photosensitive member opening formed in the main body of the apparatus;

a developing rotary which is rotatably constructed about a center axis thereof with respect to the main body of the apparatus and in which at least one developer cartridge is mountable;

driving means for rotating the developing rotary to position the developing rotary to a specified detachment position where the developing cartridge can be mounted and detached through a developer opening formed in the main body of the

apparatus;

a photosensitive member covering member openably and closably mounted on the main body of the apparatus and adapted to cover at least the photosensitive member opening in a closed state thereof;

a developer covering member free to open and close the developer opening; and

control means for permitting the rotation of the developing rotary by the driving means when at least one of a third and a fourth conditions is satisfied while prohibiting the rotation of the developing rotary by the driving means when none of the third and fourth conditions is satisfied, the third condition being the condition that the photosensitive member cartridge is mounted in the main body of the apparatus and the developer covering member is closed, the fourth condition being the condition that the photosensitive member covering member is closed.

24. An image forming apparatus according to claim 23, wherein the photosensitive member covering member covers both the developer opening and the photosensitive member opening in the closed state thereof.